

## CLAIMS

1. A method of forming a stable cardiac graft in a mammal, said method comprising transplanting skeletal myoblasts and fibroblasts into the scar tissue of a heart,

wherein said skeletal myoblasts and fibroblasts survive in scar tissue in a heart after transplantation into said scar tissue, and wherein said skeletal myoblasts and fibroblasts improve cardiac function, relative to cardiac function of a heart having similar myocardial scar tissue that is not transplanted with said skeletal myoblasts.

2. The method of claim 1, wherein cardiac function is assessed by at least one of the criteria in the group consisting of: area occupied by said scar tissue; vascularization of said scar tissue; blood flow to said scar tissue; developed pressure, systolic pressure; end diastolic pressure; and  $\Delta\text{pressure}/\Delta\text{time}$ .

3. The method of claim 1, wherein at least 10% of said scar tissue is occupied by transplanted cells four weeks after transplantation.

4. The method of claim 1, wherein said graft is used for cardiomyoplasty.

5. The method of claim 1, wherein said graft is used for closing cardiac defects.

6. The method of claim 1, wherein said graft is used for myocardial reconstructive surgery.